



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,695	01/10/2002	Rotem Cooper	010110	7705

23696 7590 09/22/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

IQBAL, KHAWAR

ART UNIT	PAPER NUMBER
----------	--------------

2686

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,695

Applicant(s)

COOPER, ROTEM

Examiner

Khawar Iqbal

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-21 are rejected under 35 U.S.C. 102(a) as being unpatentable by Reddy (WO 0101666).

3. Regarding claim 1 Reddy teaches in a mobile station including a preferred roaming list, a system acquisition procedure comprising the steps of (fig. 2):

maintaining a list of unusable wireless communications systems, each entry in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion (page 7, lines 1-24);

selecting a wireless communications system from the preferred roaming list in accordance with a predetermined system acquisition sequence and repeating the step of selecting until a usable system is selected (page 9, lines 10-32, page 10, lines 1-17);
and

attempting to acquire and register with the selected wireless communications system, wherein the selected wireless communications system is unusable if the list of unusable wireless communications systems includes a corresponding system identifier and the corresponding avoidance criterion is satisfied (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claims 2,13 Reddy teaches wherein each system identifier identifies at least one wireless communications system (page 7, lines 1-7).

Regarding claim 3 Reddy teaches wherein each wireless system identifier includes a frequency (page 4, lines 20-34).

Regarding claim 4 Reddy teaches wherein each wireless system identifier includes a SID/NID pair that uniquely identifies a wireless communications system (page 4, lines 5-15).

Regarding claims 5,14,18 Reddy teaches detecting a communications failure with a wireless communications system and adding a new entry to the list of unusable wireless communications systems, the new entry including an identifier of the failed wireless communications system and corresponding avoidance criterion (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claims 6,15,19 Reddy teaches assigning an avoidance duration to the detected system failure and calculating an avoidance time before which the failed wireless communications system is unusable, the avoidance time equal to a current time plus the avoidance duration, wherein the avoidance criterion includes the avoidance time (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claims 7,16 Reddy teaches wherein the avoidance criterion is satisfied if the stored avoidance time is greater than the current time (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claims 8,20 Reddy teaches maintaining a list of detectable wireless communications failures, each detectable wireless communications failure having a

corresponding avoidance duration; locating the detected system failure in the list of wireless communications failures; and using the corresponding avoidance duration in the step of calculating (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claim 9 Reddy teaches wherein the step of detecting includes the step of detecting failed attempts to acquire and register with the selected wireless communications system (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claim 10 Reddy teaches wherein the steps of selecting and attempting are repeated until the mobile device successfully acquires and registers with the selected wireless communication (page, 7, lines 2-24, page 9, line 5-page 10, line 17, page, 11, lines 3-30).

Regarding claim 11 Reddy teaches wherein the wireless communications systems are selected from the preferred systems list in a predetermined order of desirability (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claim 12 Reddy teaches in a mobile station, a method for marking wireless communications systems as unusable comprising the steps of (fig. 2): maintaining a list of unusable wireless communications systems, each entry in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion (page 7, lines 2-24); detecting a communications failure associated with a currently selected wireless communications system (page 9, lines 10-32, page 10, lines 1-17); and adding a record to the stored list of unusable systems, the added record including an identifier of the currently selected wireless communications system and corresponding avoidance criterion based on the detected

communications failure, wherein the currently selected wireless communications system is unusable while the corresponding avoidance criterion is satisfied (page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Regarding claim 21 Reddy teaches wherein processing circuitry is further adapted to delete an entry from the list of unusable communications system when the corresponding avoidance time is than the current time (col. page 2, line 15-page 3 line 22, page 4, line 20-page 5, line 26, page 7, lines 5-24, page 10, lines 5-33).

Regarding claim 17 Reddy teaches a mobile station comprising (figs. 1-3): a memory storing a preferred roaming list, the preferred roaming list including a first plurality of system identifiers and corresponding acquisition parameters (page 7, lines 1-24); and processing circuitry adapted to create and maintain a list of unusable systems, the list of unusable systems being stored in the memory and including a second plurality of system identifiers and corresponding avoidance criterion, wherein a wireless communications system is unusable if it is identified by a system identifier in the list of unusable systems and the corresponding avoidance criterion is satisfied (page, 7, lines 2-24, page 9, line 10-page 10, line 17, page, 11, lines 3-30).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mazzara (20030087642), La Medica (6625451), Boettger et al (6625132), Marran (6549770), Mittal (6587685), Hronek (6564055) and Dowling (6434186) teach, storing PRL in mobile station to select preferred system.

Art Unit: 2686

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is 703-306-3015.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **BANKS-HAROLD, MARSHA**, can be reached at 703-305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2684 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Khawar Iqbal

Marsha D Banks-Harold

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600